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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/741,668	NONAKA ET AL.
	Examiner	Art Unit	
	Zachary A. Davis	2137	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _30 May 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-11,15-22 and 57_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-11,15-22 and 57_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 April

2007 has been entered.

2.   By the above submission, Claims 1, 17, and 57 have been amended. No claims

have been added or canceled. Claims 1-11, 15-22, and 57 are currently pending in the

present application.

Response to Arguments

3.   Applicant's arguments filed 25 April 2007 have been fully considered but they are

not persuasive.

Claims 1-11 and 15-17 were rejected under 35 U.S.C. 103(a) as unpatentable

over Schneier et al, US Patent 5768382, in view of Christiano, US Patent 5671412, and

Stefik et al, US Patent 5629980. Claims 18-22 were rejected under 35 U.S.C. 103(a) as

unpatentable over Schneier in view of Christiano and Stefik, and further in view of

Castor et al, US Patent 5590288. Claim 57 was rejected under 35 U.S.C. 103(a) as
unpatentable over Christiano in view of Stefik.

In response to applicant's arguments against the references individually, one
cannot show nonobviousness by attacking references individually where the rejections
are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208
USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.
1986).

Specifically, particularly in reference to independent Claim 1, Applicant argues
separately that the log data in Christiano does not include a unique identifier of the
content data, discount information, or tracing information, or an indicator of a result of a
purchase mode (pages 13-14 of the present response) and that Stefik does not disclose
log data and therefore cannot disclose the log data that includes the further claimed
limitations (page 14 of the present response). Applicant presents similar arguments in
reference to independent Claims 17 and 57 as they apply (pages 14-15 of the present
response). However, first, the Examiner notes that Stefik does, contrary to Applicant's
assertion, disclose logging data (see, for example, column 34, lines 25-34, where an
audit trail is provided). Further, the Examiner believes that, although the relevant
portions were not explicitly cited in the previous Office actions, the combination of
Schneier, Christiano, and Stefik (or Christiano and Stefik alone, in reference to Claim
57) does, in fact, disclose the newly added limitations further defining the claimed log
data. More specifically, the combination of the cited prior art discloses creating log data
(Christiano, column 18, lines 53-61, as previously cited, and Stefik, column 34, lines 25-

34, as noted above) that includes a unique identifier of the content data (see Christiano,
column 18, lines 53-61, where the logged data can include the product name; see also
Stefik, column 9, lines 56-66, and Figure 7, where a work is identified by a unique
name), discount information (see Stefik, column 23, line 44-column 25, line 8; see also
Christiano, column 17, lines 35-54, and column 18, lines 53-61, where cost information
and remaining usages are recorded), and tracing information (see Christiano, column
18, lines 53-61, where logs are used to trace licenses, and column 6, line 60-column 7,
line 46, where various licenses are kept track of; see also Stefik, column 48, lines 20-
26, where data can include tracer messages), and indicates a result of the determined
mode (see Stefik, column 17, line 63-column 26, line 35, and column 43, line 45-column
50, line 14, noting, for example, column 45, lines 33-47, noting results of a particular
determined usage mode scenario).

Therefore, for the reasons detailed above, the Examiner maintains the rejections
as set forth below.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-11 and 15-17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schneier et al, US Patent 5768382, in view of Christiano, US Patent

5671412, and Stefik et al, US Patent 5629980.

In reference to Claim 1, Schneier discloses an apparatus within a tamper-

resistant circuit module (column 8, lines 17-27; column 11, lines 31-37) including a first

bus (see Figures 4C-4H), an arithmetic processing circuit (Figure 4C, CPU 302), a

storage circuit (Figure 4C, ROM 304), a second bus (see Figures 4C-4H), an interface

circuit (see Figure 4C), an encryption processing circuit (Figure 4B-4C,

encryption/decryption module 28; also column 11, lines 41-46), and an external bus

interface circuit (Figure 4C, I/O 312). However, Schneier does not explicitly disclose

determining a mode based on a handling policy and creating log data, nor does

Schneier disclose creating usage control status data or controlling the use of the

content data.

Christiano discloses determining a usage or purchase mode based on a usage

license policy (column 6, line 60-column 7, line 30) and logging data (column 18, lines

53-61), where the log data includes a unique identifier of content data (column 18, lines

53-61), discount information (column 17, lines 35-54, and column 18, lines 53-61), and

tracing information (column 18, lines 53-61, and column 6, line 60-column 7, line 46).

Christiano further discloses creating usage control status data (column 10, lines 53-57)

that includes a content identification (column 10, lines 27-33), the purchase mode

(column 10, line 53-column 11, line 11), identification of a circuit module (column 10,

lines 33-36), and a user identification (column 10, lines 53-57; column 6, lines 64-

column 7, line 1; column 4, line 61-column 5, line 2). Christiano additionally discloses

controlling use of content data (column 10, line 64- column 11, line 3) and a usage

monitor that monitors the usage control policy and status data to ensure that content

data is properly used based on a license (column 6, line 60-column 7, line 46; column

10, lines 53-57). Therefore, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to modify the apparatus of Schneier by including the

usage policies and licensing as disclosed by Christiano, in order to provide a variety of

options and flexibility in controlling usage of licensed data (see Christiano, column 3,

lines 12-19).

Although Schneier and Christiano disclose a purchase mode (see Christiano,

column 10, line 53-column 11, line 11), neither Schneier nor Christiano explicitly

discloses that the purchase mode is determined from one or more purchase mode

options, each having a different level of restriction imposed on a playback operation.

Stefik discloses a system for controlling distribution and use of digital works that

includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line

35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31,

describing limitations on number of copies, fees, and times; column 19, lines 46-57,

where rights defining playing and printing of a work are described; column 21, lines 10-

24, defining limitations on a number of copies to be made; see also column 43, line 45-

column 50, line 14, defining various use scenarios) each having a different level of

restriction imposed on a playback operation (see again column 17, line 63-column 26,

line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of

use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Stefik also discloses generating log data (column 34, lines 25-34), where the data can include a unique identifier of the content data (column 9, lines 56-66, and Figure 7), discount information (Stefik, column 23, line 44-column 25, line 8), and tracing information (column 48, lines 20-26), and the data can further indicate a result of the determined mode (see again column 17, line 63-column 26, line 35, and column 43, line 45-column 50, line 14, noting, in particular, for example, column 45, lines 33-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier and Christiano by including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

In reference to Claim 2, Schneier, Christiano, and Stefik further disclose a second interface circuit and that the first bus includes a third bus and a fourth bus (see Schneier, Figures 4C-4H).

In reference to Claim 3, Schneier, Christiano, and Stefik further disclose a third interface circuit communicating with a recording medium (see Schneier, Figure 4H, interface circuitry 406), a fifth bus, and a fourth interface circuit (see Schneier, Figures 4C-4H).

In reference to Claim 4, Schneier, Christiano, and Stefik further disclose a public key encryption circuit (see Schneier, column 10, lines 27-56) and a common key encryption circuit (see Schneier, column 9, line 62-column 10, line 11).

In reference to Claim 5, Schneier, Christiano, and Stefik further disclose that the

storage circuit stores private and public key data (see Schneier, column 11, lines 44-

48), the public key encryption circuit verifies the integrity of signature data and creates

signature data (see Schneier, column 10, lines 41-56), and the common key encryption

circuit encrypts and decrypts content data and key data using a session key (Schneier,

column 9, line 65-column 10, line 6).

In reference to Claim 6, Schneier, Christiano, and Stefik further disclose a hash

value generating circuit used by the public key encryption circuit in verifying and

creating signatures (see Schneier, column 17, lines 46-50).

In reference to Claim 7, Schneier, Christiano, and Stefik further disclose a

random number generating circuit (see Schneier, column 10, lines 57-67).

In reference to Claim 8, Schneier, Christiano, and Stefik further disclose an

external storage circuit (see Schneier, column 7, lines 57-60).

In reference to Claims 9 and 11, Schneier, Christiano, and Stefik disclose

everything as applied to Claim 8 above. Schneier, Christiano, and Stefik further

disclose that programs are executed from memory in a conventional manner (see

Schneier, column 7, lines 60-61). However, neither Schneier, Christiano, nor Stefik

explicitly discloses a storage-circuit control circuit or a storage management circuit.

Official notice is taken that it is well known in the computer arts to include a memory

controller or memory management circuit, such as a DMA or MMU, in order to allow for

the optimization of the use of memory. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify the apparatus of

Schneier, Christiano, and Stefik by including a memory controller or manager, in order

to optimize the use of memory, as is well known in the computer arts.

In reference to Claim 10, Schneier, Christiano, and Stefik further disclose that the

external bus is connected to a host processor (see Schneier, Figure 4C, where the I/O

312 is connected to external CPU 27).

In reference to Claim 15, Schneier, Christiano, and Stefik further disclose a real

time clock (see Schneier, column 11, line 46). Further, Schneier, Christiano, and Stefik

disclose encrypting key data and control data (see Christiano, column 14, lines 23-28)

and storing license key data (Christiano, column 14, lines 19-21).

In reference to Claim 16, Schneier, Christiano, and Stefik further disclose that the

storage circuit writes and erases data in units of blocks and also discloses a write lock

control circuit for controlling writing and erasing blocks of data (see Schneier, column

18, lines 39-43).

In reference to Claim 17, Schneier discloses an apparatus within a tamper-

resistant circuit module (column 8, lines 17-27; column 11, lines 31-37) including a first

bus (see Figures 4C-4H), an arithmetic processing circuit (Figure 4C, CPU 302), a

storage circuit (Figure 4C, ROM 304), a second bus (see Figures 4C-4H), an interface

circuit (see Figure 4C), an encryption processing circuit (Figure 4B-4C,

encryption/decryption module 28; also column 11, lines 41-46), and an external bus

interface circuit (Figure 4C, I/O 312). Schneier further discloses receiving an interrupt

from an external circuit, performing processing, and reporting a result of the processing

(column 11, lines 55-67). However, Schneier does not explicitly disclose determining a mode based on a handling policy and creating log data, nor does Schneier disclose creating usage control status data or controlling the use of the content data.

Christiano discloses determining a usage or purchase mode based on a usage license policy (column 6, line 60-column 7, line 30) and logging data (column 18, lines 53-61), where the log data includes a unique identifier of content data (column 18, lines 53-61), discount information (column 17, lines 35-54, and column 18, lines 53-61), and tracing information (column 18, lines 53-61, and column 6, line 60-column 7, line 46). Christiano further discloses creating usage control status data (column 10, lines 53-57) that includes a content identification (column 10, lines 27-33), the purchase mode (column 10, line 53-column 11, line 11), identification of a circuit module (column 10, lines 33-36), and a user identification (column 10, lines 53-57; column 6, lines 64-column 7, line 1; column 4, line 61-column 5, line 2). Christiano additionally discloses controlling use of content data (column 10, line 64- column 11, line 3) and a usage monitor that monitors the usage control policy and status data to ensure that content data is properly used based on a license (column 6, line 60-column 7, line 46; column 10, lines 53-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier by including the usage policies and licensing as disclosed by Christiano, in order to provide a variety of options and flexibility in controlling usage of licensed data (see Christiano, column 3, lines 12-19).

Although Schneier and Christiano disclose a purchase mode (see Christiano, column 10, line 53-column 11, line 11), neither Schneier nor Christiano explicitly discloses that the purchase mode is determined from one or more purchase mode options, each having a different level of restriction imposed on a playback operation. Stefik discloses a system for controlling distribution and use of digital works that includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line 35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31, describing limitations on number of copies, fees, and times; column 19, lines 46-57, where rights defining playing and printing of a work are described; column 21, lines 10-24, defining limitations on a number of copies to be made; see also column 43, line 45-column 50, line 14, defining various use scenarios) each having a different level of restriction imposed on a playback operation (see again column 17, line 63-column 26, line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Stefik also discloses generating log data (column 34, lines 25-34), where the data can include a unique identifier of the content data (column 9, lines 56-66, and Figure 7), discount information (Stefik, column 23, line 44-column 25, line 8), and tracing information (column 48, lines 20-26), and the data can further indicate a result of the determined mode (see again column 17, line 63-column 26, line 35, and column 43, line 45-column 50, line 14, noting, in particular, for example, column 45, lines 33-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier and Christiano by

including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

6.   Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Christiano and Stefik as applied to claim 17 above, and further in view of Castor et al, US Patent 5590288.

In reference to Claims 18 and 19, Schneier, Christiano, and Stefik disclose everything as applied to Claim 17 above. However, Schneier as modified above does not explicitly disclose reporting the result of processing by outputting an interrupt. Further, Schneier as modified/above does not explicitly disclose that the external bus interface includes a common memory and that the external circuit obtains a result by polling.

Castor discloses a system which allows a computer to request another computer to execute a procedure (column 3, lines 38-42) including outputting an interrupt (column 12, lines 29-33). Castor further discloses a common memory (the buffer of column 12, lines 33-35) and polling an interface circuit to obtain a result (column 12, lines 35-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier as modified above by including the interrupt, buffer, and polling of Castor, in order to increase reliability, lower cost, and allow easier upgrades in a distributed computing system (Castor, column 4, lines 11-21).

In reference to Claim 20, Schneier as modified above further discloses first status

registers including flags (see Castor, column 12, lines 29-35).

In reference to Claim 21, Schneier as modified above further discloses storing

and executing an interrupt program (see Castor, column 5, lines 49-51).

In reference to Claim 22, Schneier as modified above further discloses storing

and executing a plurality of interrupt programs and subroutines (see Castor, column 5,

lines 49-55).

7.   Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Christiano in view of Stefik.

Christiano discloses a method including determining a usage or purchase mode

based on a usage license policy (column 6, line 60-column 7, line 30); creating log data

(column 18, lines 53-61) that includes a unique identifier of content data (column 18,

lines 53-61), discount information (column 17, lines 35-54, and column 18, lines 53-61),

and tracing information (column 18, lines 53-61, and column 6, line 60-column 7, line

46).; creating usage control status data (column 10, lines 53-57) that includes a content

identification (column 10, lines 27-33), the purchase mode (column 10, line 53-column

11, line 11), identification of a circuit module (column 10, lines 33-36), and a user

identification (column 10, lines 53-57; column 6, lines 64-column 7, line 1; column 4, line

61-column 5, line 2); monitoring usage control policy and status data to ensure that

content data is properly used based on a license (column 6, line 60-column 7, line 46;

column 10, lines 53-57); controlling use of content data (column 10, line 64- column 11,

line 3); recording the content data (column 10, lines 62-64, where the product is used on a computer system, and therefore stored at least temporarily therein; see also column 6, lines 28-31, where various storage media are disclosed); and encrypting key data and control data (column 14, lines 23-28). However, although Christiano discloses a purchase mode (see Christiano, column 10, line 53-column 11, line 11), Christiano does not explicitly disclose that the purchase mode is determined from one or more purchase mode options, each having a different level of restriction imposed on a playback operation.

Stefik discloses a method for controlling distribution and use of digital works that includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line 35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31, describing limitations on number of copies, fees, and times; column 19, lines 46-57, where rights defining playing and printing of a work are described; column 21, lines 10-24, defining limitations on a number of copies to be made; see also column 43, line 45-column 50, line 14, defining various use scenarios) each having a different level of restriction imposed on a playback operation (see again column 17, line 63-column 26, line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Stefik also discloses generating log data (column 34, lines 25-34), where the data can include a unique identifier of the content data (column 9, lines 56-66, and Figure 7), discount information (Stefik, column 23, line 44-column 25, line 8), and tracing information (column 48, lines 20-26), and the data can further indicate a

result of the determined mode (see again column 17, line 63-column 26, line 35, and column 43, line 45-column 50, line 14, noting, in particular, for example, column 45, lines 33-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Christiano by including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

zad

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